



## ABSTRACT OF DISCLOSURE

A non-volatile memory cell and related system utilize ferroelectric capacitors as data storage elements. Circuitry is provided for writing to a single ferroelectric capacitor storage element, as well as to dual storage elements operating inversely. The storage elements are read by use of a sense amplifier in a configuration which automatically restores the original data states, thereby eliminating the need for a subsequent restore operation. Memory systems are described which include circuitry for driving bit lines, word lines and drive lines to accomplish both the write and read operations.